

## ABSTRACT

In a logic integrated circuit such as an FPGA, a controller reads in an instruction, and then directly transmits ON/OFF information for each of bits composing microcode included in the instruction, to registers and data memories that are allocated to each of the bits through control lines, to thereby control the registers and data memories. Thus, processing executed by the controller is simplified in this construction. This allows making the controller having a simple structure, thereby making it possible to construct a simple CPU core on the logic integrated circuit such as the FPGA, decreasing a space of analytic logic, and eliminating necessity for re-integrating a hardware circuit every time the logic is renewed.

TOP SECRET//~~COMINT~~